

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

S-E-C-R-E-T
NOFORN

COUNTRY	Czechoslovakia	REPORT	
SUBJECT	Eva Uranium Mine at Jachymov	DATE DISTR.	12 May 1955 25X1
		NO. OF PAGES	10
DATE OF INFO.		REQUIREMENT NO.	RD 25X1
PLACE ACQUIRED		REFERENCES	
DATE ACQUIRED		This is UNEVALUATED Information	

APPRaisal OF CONTENT IS TENTATIVE.

25X1

1. Location

The Eva mine at Jachymov was located about 300 meters west of the road leading from Lipa to Bozi Dar (N 51/K 61), about 600 meters northwest of the cross-roads on the Mariasorg (N 51/K 60) - Lipa - Bozi Dar roads. The area of the mine was about 700 meters long and 500 meters wide, fenced with a double barbed-wire fence forming a guarded belt about three meters wide. The space between the two rows of barbed wire was sprinkled with white sand and was well lit at night. The fence itself was about three meters high. There were woods around the whole pit area. The free employees came by bus and entered the area by a gate on the west side, while the prisoners went in by a gate on the south side.

2. Interior of the mine

- a. The mine had eight levels in all about 50 meters apart. The eighth level was finished in spring 1954. As an older mine, Eva used the points of the compass as names for the main corridors, instead of using the names of the veins. As a contrary example, the Eduard mine had tunnels called Svycar, Fiedler, Mala Drasna, etc.).
- b. Above the first level, at a depth of 25 meters, there was an old level called a gallery, a relic of earlier times when the Eva mine consisted of a corridor. No work was being done on this level, and prisoners had no access to it for security reasons.
- c. The first level was manned by many workers, since not enough pitchblende was found there. In autumn 1953, a new corridor about 400 meters long was opened and new veins were found, but actual mining had not started as of May 1954, and only about 10 people, free workers only, worked here. Mining was expected to start at the beginning of 1955.

S-E-C-R-E-T
NOFORN

STATE	X	ARMY	X	NAVY	X	AIR	X	FBI	X	ABC	X	OSI	X
-------	---	------	---	------	---	-----	---	-----	---	-----	---	-----	---

(Note: Washington distribution indicated by "X"; Field distribution by "X")

INFORMATION REPORT INFORMATION REPORT

S-E-C-R-E-T
NOFORN

25X1

-2-

- d. The second level was rich in ore and pitchblende. Only prisoners worked here, 40 to a shift. The level had four main corridors, north, south, west, and east. The eastern corridor was dug in April 1954 by a shock team of prisoners who reached an output of 600 meters in one month. Work had stopped in the western corridor and the face alongside it because of lack of ore and a considerable flow of water. Only the north and south corridors were being worked. The workings of the northern corridor were marked SAV-II-00 up to 15. Workings SAV-II-00, 01, and 15 were rich in pitchblende of the type called "black, shiny stone". The informant, who worked in SAV-II-00 and 01, states that because of a very rich ore deposit there he sometimes reached 180% of his norm. Ore was found in working SAV-II-11. The other workings yielded very little ore or pitchblende. The south-corridor workings were marked JAV-II-20 to 15. Ore was found on working 00, and pitchblende on 03, 04, and 05. The yield on the other workings was very small.
- e. The third level was divided up like the second level, and the yield of ore was the same. The numbering of the workings was the same except that the Roman figure was changed to III. About 30 prisoners and 20 civilians worked on this level.
- f. The fourth and fifth levels were excavated according to a new mining method whereby the corridors had a prescribed shape 270 x 250 centimeters and had a double-rail track, on which ran mine engines for carting away nonradio-active material. There were stations for charging the engine storage batteries. These levels were the richest in pitchblende and ore.
- g. The sixth level had a similar yield of ore and pitchblende to levels four and five, but was insufficiently equipped on the technical side. The cars removing the ore were operated by hand, and loading stations and technical fittings were only under construction as of spring 1954.
- h. The seventh level was finished at the end of 1952. Preliminary work for mining did not start until the spring of 1953. At the beginning of 1954, the preparatory work was finished, and real mining work began, but little had been done as of the spring of 1954.
- i. The eighth level, finished in the spring of 1954, consisted for the time being of a corridor about 300 meters long only. No mining was being done here, since the preliminary work was to take at least a year. Immediately after the eighth level had been made, excavation of a ninth level was started, and it was anticipated that it would be finished in 1955.
- j. All levels had a prescribed quota of ore, consisting of two trucks, contents 0.75 cubic meters, per shift. Pitchblende itself was not included in this quota, but came under the plan. The average yield for one shift was 60 - 100 kg. per level, this being the quota for levels with a fair yield of ore and pitchblende. In the Eva mine, this quota did not apply to the first, seventh, and eighth levels.

3. Mining output and methods

Only six hours' actual mining was done per shift, the rest of the time being occupied in such activities as clearing. On all the levels the working cycle was finished at the same time; so that there was always a shortage of cars at these

S-E-C-R-E-T
NOFORN

S-E-C-R-E-T
NOFORN

-3-

times for removing the dead material, and the mining plan was thereby hampered. On an average, 500 cars of dead material were taken out on one shift, the largest output being 590 cars per shift. On levels where ore was found (from the second to the sixth), the estimated output was two carloads, and daily yield was about 30 cars of ore. Pitchblende yield varied, the average daily yield being about 1,200 kg., for which, however, there was no specific plan. Since the yield of ore was limited, and the foremen on each level had to keep to the plan of two carloads, the practice was adopted of keeping back two cars when the yield was larger and leaving them in the working, to be used to fill the quota when the yield was insufficient. A special method, however, was most often used when there was a shortage of ore: the ore was made. This was done by sprinkling a certain quantity of radioactive particles of pitchblende onto dead or partially radioactive material. The mine management punished this so-called debasement of pitchblende as sabotage with sentences of up to 10 years. In spite of this severe measure, however, the method was very often used, since it gave the miners the means of increasing their earnings. This artificially made ore was hard to distinguish from real ore, and cases occurred when the yield of ore was low where the overseer himself arranged with the miners for ore to be "made" and took care that the miners were not surprised by inspectors when so doing. There were even cases where the overseer himself supplied the necessary pitchblende. The reason for it was that if the plan was not fulfilled, the overseer would be abused by the Soviets and lose his money bonus.

4. Treatment and removal of the ore

As a precautionary measure the ore was sorted in a sorting room at the mine itself, and the dead material was thrown out onto the slag heap. The ore was then put into wooden crates with metal fastenings, measuring 45 x 35 x 35 centimeters. Each crate was weighed, numbered, and shipped by truck to the Expert Technical Control at Ostrov, whence, after treatment, it was shipped to an unknown destination.

5. Employees and pay

About 150 free workers and 200 prisoners per shift worked in the Eve mine, so the total number of employees was in the neighborhood of 1,050. All work was paid according to state regulations. All pit authorities, including the overseers, were dependent on the fulfillment of the plan and had a fixed basic salary, which might be increased by bonuses when the plan was fulfilled by 90%. When the plan was 100% fulfilled, the full 100% bonus was paid, with what was called an efficiency bonus where a level fulfilled the plan above 100%. These efficiency bonuses were not dependent on the whole mine's fulfilling the plan, so that where the mine fulfilled the plan to 90% and one level over 100%, the 100% bonus was paid for that level. Payment of bonuses was arranged by the authorities, that is, the Soviets, it was subject to strict regulations which came into force where rules were not obeyed, the regulations applied to debasement of ore and blasting and security measures. Only the overseers, inspectors of ore, and blast foremen came under these regulations. If infringement was ascertained, either a part or the full bonus might be withheld. Miners' pay depended on the work they did. Unskilled labor on the surface and in the mine was paid according to five classes of pay. The classes were regulated by the difficulty of the work. The fifth class of pay was 5.10 or 5.20 crowns per hour. This class included men who emptied trucks onto the slag heap and men who filled trucks in the mine. Filling was done through a funnel. Skilled miners and other skilled workers, such as carpenters, masons, etc., came under pay classes six, seven, and eight.

S-E-C-R-E-T
NOFORN

S-E-C-R-E-T
NOFORN

25X1

Class six included assistant face workers, joiners, masons, mechanics, and electricians. Class seven consisted of skilled miners and expert joiners, masons, electricians, and mechanics. The eighth class included the best shockworkers, excavators in tunnels, and free workers employed as face workers who had a "blasting certificate" (meaning that the worker was allowed to do blasting himself and had passed blasting tests), and blasting foremen. Pay was so arranged that when the norm was fulfilled 100%, each worker received his fixed hourly wage with bonus and efficiency supplements, the latter being dependent on fulfillment of the plan in meters and in ore but not dependent on the accomplishment of other workers, each worker being paid separately. As far as possible, prisoners were paid according to state regulations. Their bonuses were reduced to the minimum, those which were not paid going into the head overseer's pocket. This machination was carried out by transferring a certain part of the prisoners' pay to a financial fund from which purchases of things needed for the pit were made when the budget was exceeded. The overseer was in charge of the material for his individual level and always recorded an outlay of more than he really gave out, the difference, with which he should have bought working materials, going into his own pocket. This was therefore a "black" fund which the overseer used simply to enrich himself.

6. Norms

The norms in force dated from 1951, when they had been stiffened. The norms for corridor-making were from 40 to 50 cm. per man per shift, depending on the hardness of the rock, keeping a shape 270 x 250 cm. Shock teams had what was called a complex norm, counting the output of the whole team and not of individuals. This norm included timbering, laying rails, and carting away material, types of work which were not included in the ordinary norm, where each job had its own norm and was paid separately. With a complex norm, the norm for progress in cutting was lowered because of the other types of work carried out. The complex norm was harder since a face cutter must cover meters for the whole team in order that the same output could be attained with a complex norm as that reached by individual workers working the ordinary norms. The face cutter was responsible for the earnings of the whole gang and was thus forced to a higher output of work, which was a financial saving for the mine administration by comparison with ordinary norms. The complex norm had been in existence since 1951, but the mine had only had it in force since the middle of 1953. There were certain advantages connected with the complex norm offered by the mine administration to the team operating it. The team was issued new mechanical equipment and tools, mining clothes, and rubber boots, and had the assurance that it would remain in its own working and not be transferred elsewhere. (A practice existed in the Jaachymov mines whereby a prisoner was transferred to a working where a free face worker was doing the cutting but not clearing the working. This work must be done by the prisoner without his being paid for it, and in addition, he had to keep up the norm for face cutting, which was almost impossible. Prisoners would get the section in order, and when it was possible to work it normally again, they were transferred by the mine authorities to another working, also in a bad state, the section which had been cleared being given to free workers). Workers cutting the ends of corridors and partitions between them had a norm of 35-40 cm. per man per shift, keeping a triangular shape, the height being 220 cm. and the base 130 cm. The norms for workings were set by the square meter; 2.2 square meters were reckoned per man per shift. These square meters were estimated on the depth of the working, the width of the corridor being arbitrary and not accounted for in the pay. According to mine regulations, the minimum width for a corridor was 80 cm. The width of the corridor depended on the skill of the face

S-E-C-R-E-T
NOFORN

S-E-C-R-E-T
NOFORN

25X1

-5-

cutter and his ability in drilling and blasting. The broader the face, the more unpaid work there was clearing away the rock. The prescribed height for the working was from 220 to 350 cm., and the height which was cut was counted and paid for in the surface covered. It was more advantageous for the face cutter to make the working higher to fulfill the norm, in spite of the fact that the mine authorities did not like this for safety reasons, since it was then more probable that the corridor would cave in. The method of reckoning norms by the square meter took no account of the hardness of the rock and was the same for all sections, so that in soft rock it was of course fulfilled more easily than in hard rock. The complex norm in the workings differed from the norms for tunnels in that in tunnels the face cutter did all the work, timbering, rail-laying, etc., alone, or more exactly, with one assistant, since there were two people in the working, but the norm remained 2.2 square meters. Miners in the workings had the same advantages as those working in the tunnels. In addition to the norms counted by meters, there were norms for ore in the workings, which, however, were counted and paid separately, and it was common for a miner to fail to fulfill the norm in meters, but to increase his earnings by fulfilling the norm in output of ore; thus he might fulfill the norm in meters by 80% and the norm in ore by 100%, reaching a fairly high rate of earnings.

7. Mechanical equipment

- a. The working of the mine was old-fashioned, for ore was mined from the various levels by means of trucks and cages. On the surface, there was one engine run on crude oil on the slag heap. This engine did half the work; the rest was done by hand. On the first, second, and third levels, the removal of dead material was not mechanized. These levels had equipment only in the working itself; i.e., pneumatic drill hammers, drill rests, automatic picks, drill shafts and drill heads, and apparatus for air and water circulation and ventilation.
- b. Latterly, the Soviets were introducing Soviet mining methods, and the mine was also using Soviet pneumatic hammers called "telescopes" which differed from the Czech types from Vitkovice in that the drill hammer and the rest were made in one. These "telescopes" were used for vertical drilling of roofs only, workings where there was no ore. They drill the whole face of the roof to a distance of 50 m. (up to 200 holes 150 cm. long) and everything is burned away at once. Removal of rock and levelling is accomplished by means of pneumatic rakes. The "telescopes" are massively conceived, with more revolutions than the Czechoslovak pneumatic hammers. They also have a larger stroke, and the flow of water to cool the drill head is simplified. From the "telescope" the water goes direct to the drill shaft, by contrast with the Vitkovice drill, where what is called a "hydraulic head" must be used. Drilling time is shortened by up to 15 minutes for a two-meter hole, the Vitkovice drill taking 20 minutes, the "telescope" 5 minutes.
- c. For horizontal drilling, the Soviets introduced copies of American drills into the pits. These are heavier; they weigh about 35 kg., and the stroke impact is 120 kg. They have a high rate of revolution and the speed for drilling holes is increased about as much as with the "telescope". They were called rusak among the mine employees and were not popular because they often broke down. They were mainly used in the tunnels.
- d. Both the types of Soviet machines mentioned have thick drill shafts, called in

S-E-C-R-E-T
NOFORN

S-E-C-R-E-T
NOFORN

25X1

-6-

Russian bory, about 5 cm. in diameter, six-sided, without metal heads and without screws. For vertical drilling, a set of four of these shafts is necessary - 50 cm., 100 cm., 130 cm., and 150 cm.

- e. On these levels what was called an "emptying section", consisting of a shaft 4 x 4 m., was blasted out, connecting all three levels and prepared for modernizing the working of the mine with automatic scoops.
- f. The fourth and fifth levels were like the preceding, but the removal of dead rock was mechanized, and electric locomotives drew the trucks with the rock to the cage. The sixth, seventh, and eighth levels were equipped similarly to the first, second, and third levels.

8. Security and safety measures

- a. On the surface. The mine was fenced with a double barbed-wire fence about 3.5 m. high, with a column with a searchlight on it every 20 m. and wooden guard towers 6 m. high, constantly manned, at the corners or along the sides. On both sides of the double fence there was a guarded zone 3 m. wide, sprinkled with white sand and fenced off by a fence 70 cm. high. It was marked with notices with the following inscriptions: "Attention! Zone under fire, Access forbidden to civilians under risk of being fired upon." In the gatekeeper's posts, members of the StB kept a check on the miners and took their work passes from them. These passes remained in the gatekeeper's post during the shift.
- b. In the mine
 - (1) In order to safeguard the security of the mines, the Administration of the Jachymov mines issued a brochure containing safety regulations. Each new miner was given this pamphlet and after personal instruction from the security official, he signed a declaration that he had been informed of the safety regulations. If the security official found any shortcomings when he carried out his daily check, he fined the miner who had infringed the regulations. The maximum fine was 100 crowns. Work intended to ensure the miners' safety, which had to be carried out, according to the regulations, was not included in the norms; so the miners had to do it for nothing and as far as possible tried to evade it. Accidents were therefore a daily occurrence. Serious accidents sometimes involving fatalities occurred on an average of once a month. The mine administration tried to limit the number of accidents by reprimands and fines, but it did not pay work carried out to make the pits safe.
 - (2) On the security side, for the prevention of escapes, the StB kept a daily check on the mine. Two members patrolled the old galleries to see if any prisoners were attempting to escape, and at the same time, they looked for old galleries which had not been mapped out, since most of the plans of the old corridors had been lost. The two members of the StB had life belts, electric torches, and compasses, and their presence effectively prevented escape by digging through the old pit.

9. Personalities in the management

- a. Works engineer (also acted as manager):

S-E-C-R-E-T
NOFORN

~~S-E-C-R-E-T~~
NOFORN

25X1

-7-

Odikadse (fnu), [REDACTED]

b. Manager of the survey department:

(Lnu), Petr, [REDACTED]

c. Official in charge of shifts:

Masak (fnu), [REDACTED]

d. Overseer on first and second levels:

Birnhanal (fnu), [REDACTED]

25X1

e. Overseer on the third level:

Dufek (fnu), [REDACTED]

25X1

f. Overseer on the fourth level:

Vrana (fnu), [REDACTED]

g. Overseer on the fifth level:

Holub (fnu), [REDACTED]

h. Overseer on the sixth level:

Masour (fnu), [REDACTED]

i. Overseer on the seventh level:

Kraus, Jiri. [REDACTED]

~~S-E-C-R-E-T~~
NOFORN

~~S-E-C-R-E-T~~
NOFORN



25X1

~~-8-~~




25X1

j. President of the Works Council:

Slapnicka (fnu),



25X1

1.  Comment: The reference is presumably to the Vitkovice
Klement Gottwald Iron Works in Ostrava-Vitkovice.

25X1

~~S-E-C-R-E-T~~
NOFORN

S-E-C-R-E-T
NOFORN

25X1

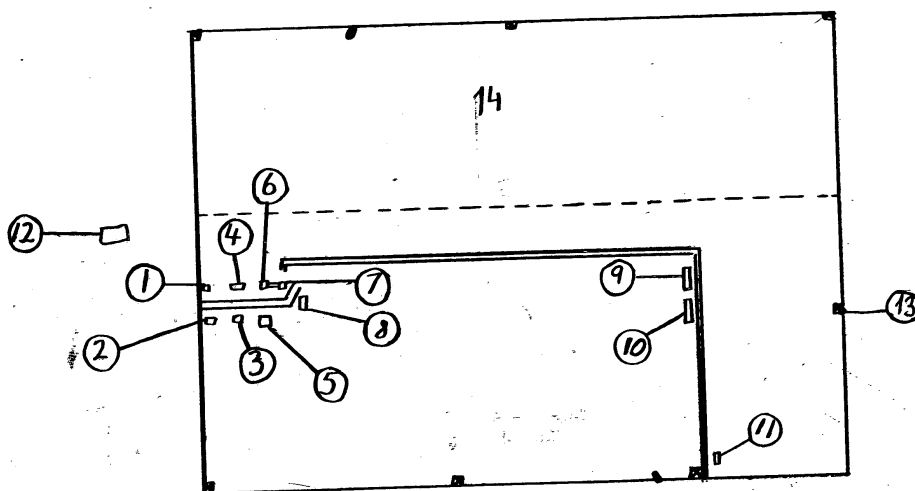
-9-

Legend to Annex

1. Gatekeeper's post for free employees. A wooden, single-story building about 12 x 6 m. There were always two members of the StB in it and one woman taking in passes.
2. First-aid post, in a wooden, single-story building about 12 x 6 m. There was always one nurse here, and the doctor attended every day from 2 pm to 4 pm.
3. Mine administration offices and free workers' cloakrooms, in a wooden single-story building, 12 x 6 m. There were six offices in all, for overseers and foremen.
4. Mechanical and electrical workshops, in a masonry building faced with concrete, two-storied, 15 m. long and 7 m. wide.
5. Soviet offices, in a two-storied, masonry house, 12 x 12m., a former villa converted into offices. On the ground floor were the survey department, the office for payment of wages, and the manager's (Odikadze's) office. On the second floor were the accounts offices, the departments of geophysics and geology, and a room for issuing Geiger counters.
6. Pit winder in a masonry building, single-story, 8 x 8 m.
7. Pit head, concrete construction about 15 m. high.
8. Lamp shop, store for material, and joiner's shop, in a wooden single-story building, about 8 x 15 m.
9. Compressor room, at the foot of the slag heap, a masonry building with no upper story, about 20 x 7 x 6 m. in size.
10. Sorting shop for ore, in a wooden, single-story building, 25 x 7 m. The ore was only roughly sorted here.
11. Gatekeeper's post for prisoners, on the south side of the pit area, also a guard room for members of the StB. A wooden single-story building, 12 x 5 m.
12. Mine canteen for civilian employees, standing outside the mine area, about 100 m. northwest of the entrance for free employees. A new wooden, single-story building, 30 x 15 m.
13. Guard towers, around the whole mine area, seven of them in all. Wooden towers, about 6 m. high, covered by a roof. There was one member of the StB armed with an automatic carbine and at night a light MG, Czech type, on each of them.
14. Area where trees were felled in autumn 1953 and which was prepared for the construction of new mine buildings and workshops. Eva was to be transferred to new buildings in 1955, becoming a modern mine like Rovnost or Svornost. Up to March 1954, only the materials had been assembled, and no building had been begun.

25X1

-10-



Eva Mine at Jachymov
Approximate scale 1:5000

SECRET
NOFORN